Abstract

Disclosed is a modified glucose dehydrogenase having pyrroloquinoline quinone as a coenzyme, wherein one or more amino acid residues in a region of 186-206 amino acid of water-soluble PQQGDH derived from Acinetobacter calcoaceticus or in an equivalent region from other species are replaced with other amino acid residues. Also disclosed is a gene coding for the modified glucose dehydrogenase of the invention, a vector comprising the gene of the invention and a transformant comprising the vector, as well as a glucose assay kit and a glucose sensor comprising the modified glucose dehydrogenase of the invention.